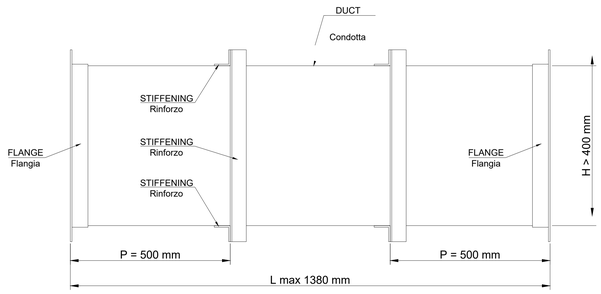
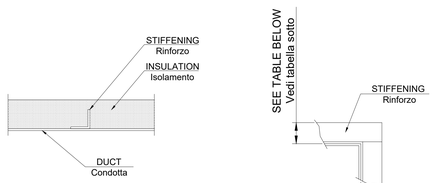
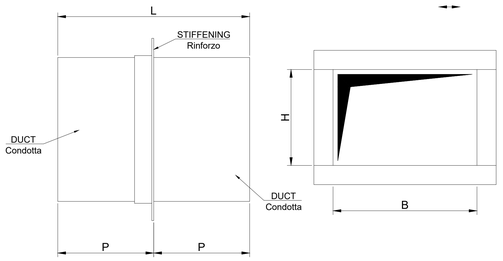
STIFFENINGS EXAMPLES FOR RECTANGULAR DUCTS
Esempio di rinforzi per condotte rettangolari



NOTES:
- DO NOT FIT STIFFENINGS UNDER L ≤ P CONDITIONS (PITCH LESS THAN 500 mm)
- STIFFENINGS SHALL ONLY BE APPLIED ON THE TRUNK SIDE EXCEEDING 500 mm

DUCT MATERIAL TYPE Materiale Condotta	**DUCT INSULATION** Isolamento condotta
GALVANIZED STEEL DUCTWORK GALVANIZATION CLASS Z275 Canali in acciaio zincato Zincatura Classe Z275	30 mm thk. ISOVER TECH CRIMPED ROLL COMPLETE WITH ALUMINIUM FOIL Pannello in Isover Tech Crimped Roll spess.30 mm completo di foglio in alluminio



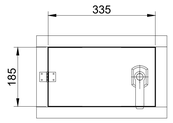


DUCT HIGH SIDE Altezza condotta	MAX TRUNK LENGHT Lunghezza tronco	STIFFENINGS PITCH Passo rinforzi	STEEL PROFILE Profilo in acciaio
H [mm]	L [mm]	P [mm]	[mm]
≤ 400	1380	500	L 25 x 25 x 3 in LONGEST SIDES
> 400	1380	500	L 25 x 25 x 3 in 4 SIDES
DO NOT FIT STIFFENINGS UNDER TRUNK LENGTH ≤ STIFFENING PITCH CONDITIONS Nelle condizioni di Lunghezza tronco ≤ Passo dei rinforzi non inserire rinforzi			

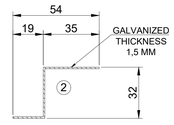
DOOR DIMENSION
Dimensione Botola d'ispezione

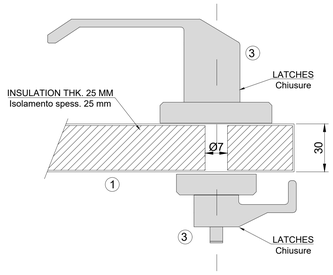
TAG.	SIDE DUCT Lato condotta	DOOR DIMENSIONS Botola d'ispezione	
		A [mm]	B [mm]
A.D.1	300/400	335	185

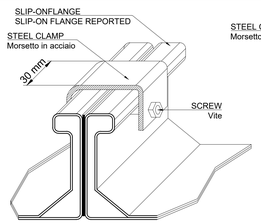
ITEM Pos.	DESCRIPTION Descrizione
1	INSPECTION DOOR GALVANIZED STEEL Z275 THK. 1.5 MM AND INSULATION GLASS WOOL THK 25 MM Botola di ispezione in acciaio zincato spess. 1.5 mm e isolamento in lana di vetro spess. 25 mm
2	PERIMETER FRAME GALVANIZED STEEL Z275 THK. 1.5 MM Telaio perimetrale in acciaio zincato Z275 spess. 1.5 mm
3	LATCHES Chiusure
4	HINGE Cardine

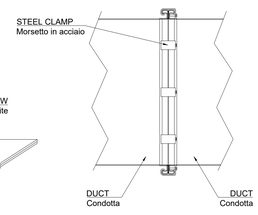


A.D.1	SIDE DUCT Lato Condotta	200	DOOR Botola	335 x 185









DUCT SIDE Lato condotta	CLAMPS QUANTITY Quantità morsetti
[mm]	[n°]
0 - 450	1
451 - 900	2
901 - 1350	3
1351 - 1800	4
1801 - 2250	5

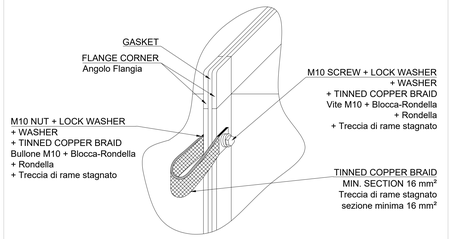
CLAMPS SPACING ON SLIP-ON FLANGE / SLIP-ON FLANGE REPORTED CONNECTION ON DUCT SIDE
Interasse morsetti sulle flange Slip-On / flange Slip-On Riportate in ogni lato della condotta

DUCTS IN LOW PRESSURE CONDITION
Condotte in condizioni di Bassa Pressione

RECTANGULAR DUCT CONSTRUCTION SCHEDULE - PRESSURE CLASS Tabella di montaggio Condotte - Pressione Classe					-500 Pa ÷ 0 Pa
DUCT LONGEST SIDE "W" OR "H" Lato maggiore condotta "W" o "H"	DUCT MAXIMUM LENGTH Lunghezza massima tronco	SHEET METAL THICKNESS Spessore foglio	INTERMEDIATE REINFORCEMENT Rinforzo intermedio	LONGITUDINAL SEAM TYPE Tipo di connessione longitudinale	FLANGE TYPE / SIZE Tipo di flangia
[mm]	[mm]	[mm]			
0 - 300	1340	1.0	NOT REQUIRED	PITTSBURGH	SLIP-ON FLANGED
301 - 750	1340	1.2	NOT REQUIRED	PITTSBURGH	SLIP-ON FLANGED
751 - 1000	1340	1.5	NOT REQUIRED	PITTSBURGH	SLIP-ON FLANGED REPORTED
1001 - 1500	1340	1.5	L 25 x 25 x 3	PITTSBURGH	SLIP-ON FLANGED REPORTED
1501 - 2500	1340	1.5	L 25 x 25 x 3	PITTSBURGH	SLIP-ON FLANGED REPORTED

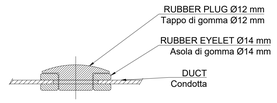
RECTANGULAR DUCT CONSTRUCTION SCHEDULE - PRESSURE CLASS Tabella di montaggio Condotte - Pressione Classe					0 Pa ÷ 500 Pa
DUCT LONGEST SIDE "W" OR "H" Lato maggiore condotta "W" o "H"	DUCT MAXIMUM LENGTH Lunghezza massima tronco	SHEET METAL THICKNESS Spessore foglio	INTERMEDIATE REINFORCEMENT Rinforzo intermedio	LONGITUDINAL SEAM TYPE Tipo di connessione longitudinale	FLANGE TYPE / SIZE Tipo di flangia
[mm]	[mm]	[mm]			
0 - 500	1340	0.6	NOT REQUIRED	PITTSBURGH	SLIP-ON FLANGED
501 - 900	1340	0.8	NOT REQUIRED	PITTSBURGH	SLIP-ON FLANGED
901 - 1200	1340	1.0	NOT REQUIRED	PITTSBURGH	SLIP-ON FLANGED
1201 - 1400	1340	1.2	NOT REQUIRED	PITTSBURGH	SLIP-ON FLANGED
1401 - 3000	1510	1.5	NOT REQUIRED	PITTSBURGH	SLIP-ON FLANGED REPORTED
EXHAUST DUCTS SHALL BE MADE OF 1.2 MM SHEET UP TO A WIDTH OF 1200 MM AND 1.5 MM SHEET FOR WIDER DUCTS Le condotte di espulsione devono essere di spess. 1.2 mm fino ad una larghezza di 1200 mm e di spess. 1.5 mm per larghezze maggiori					

EARTHING BOSS DETAIL FOR INDOOR DUCTS
Dettaglio collegamento messa a terra per condotte interne



TINNED COPPER BRAID IS SCREW INTO THE MOUNTING POINT BETWEEN 2 DUCT TRUNKS
La treccia di rame stagnato è avvitata nell'asola del profilo in angolo della flangia tra 2 tronchi di condotta

TEST POINT HOLE TYPICAL DETAIL
Dettaglio tipico di Punto di Misurazione

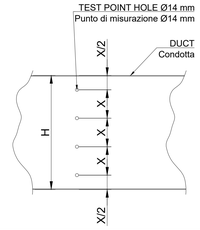


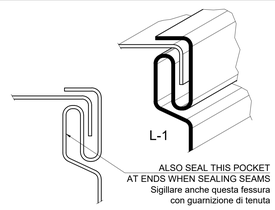
TEST POINT NUMBER
OF HOLES CALCULATION

N°HOLES = H DUCT / 150
HOLE'S SPAN X = H DUCT / N

Calcolo numero di forature per
Punti di Misurazione

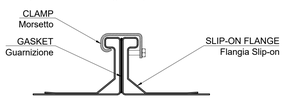
N° forature = Altezza condotta / 150
X passo forature = Altezza condotta / N





LONGITUDINAL SEAM TYPE: - PITTSBURGH
Tipo di Connessione Longitudinale: - Pittsburgh

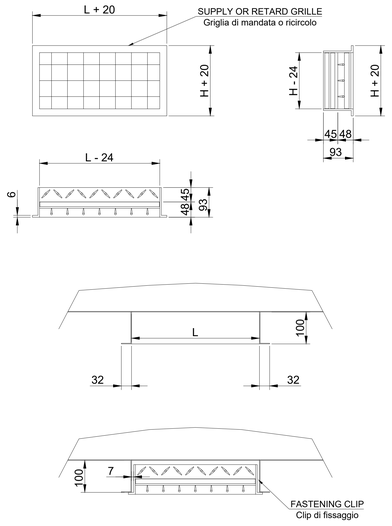
SLIP -ON FLANGE WORKING RANGE: -750 Pa / +1000 Pa
Campo di utilizzo flangia Slip-on: -750 Pa / +1000 Pa



FLANGE TYPE: - SLIP-ON FLANGE
Tipo di Flangia: - Flangia Slip-On

FLANGE TYPE: - SLIP-ON FLANGE REPORTED
Tipo di Flangia: - Flangia Slip-On riportata

TYPICAL
GRILLE + AIRFLOW ADJUSTABLE DAMPER INSTALLATION DETAIL
Dettaglio tipico di installazione griglia con serranda di regolazione flusso



REVISION	N.	DATE	DESCRIPTION	ELABORATED	VERIFIED	APPROVED
	01	19/08/2024	Second issue - ESS plant project	Idea Digital Solution	Engie	Engie
	00	15/07/2024	First issue - ESS plant project	Idea Digital Solution	Engie	Engie

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PROJECT
RTN CONNECTION PROJECT
SSE TECHNOLOGICAL INSTALLATIONS PROJECT
WS5 SHOP DRAWINGS

CLIENT

CODE	DRAW
MXP-MEC-PL-215_9	HVAC DETAILS

DATE	SCALE	LOCATION
August 2024	-	METROPOLITAN CITY OF MILAN MUNICIPALITY OF NOVIGLIO

PROJECT LEVEL	DRAWING CODING
WS5 SHOP DRAWINGS	MXP-MEC-PL-215_9 - HVAC Details

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